

**Technical Comments**  
**Use Attainability Draft Work Plan**  
**Coffee Creek and Mossy Lake**  
**Crossett, Arkansas (dated June 15, 2011)**

**Prepared for**  
**Georgia-Pacific (GP), Crossett Paper Operations & Arkansas Department of**  
**Environmental Quality**

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These comments are being provided to the Arkansas Department of Environmental Quality (ADEQ) for the draft document titled *Work Plan for Use and Attainability Analysis of Coffee Creek and Mossy Lake*. This document describes a work plan prepared to support the development of a use attainability analysis (UAA) report for Coffee Creek and Mossy Lake in Crossett, Arkansas, within the Gulf Coastal ecoregion.

Please feel free to contact Matt Hubner, U.S. Environmental Protection Agency – Region 6, at 214-665-9736, for any questions related to the technical comments provided below.

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**Specific Comments**

**1.1** The draft work plan states that the goal of the investigation “is to determine if the current designated use for Coffee Creek and Mossy Lake is appropriate and if any revisions to the designated use for these water bodies should be made.”

This purpose statement is unclear because currently there are no aquatic life beneficial use designations for Coffee Creek and Mossy Lake. If this statement is taken to mean that this study will investigate whether the lack of aquatic life beneficial uses on these waterbodies is appropriate, then it would indicate that the goal is to simply re-evaluate the findings of Environmental Protection Agency’s (EPA) 2007 Parsons study? The Parsons report conclusions indicate that there is an aquatic life use present for these waterbodies. EPA was under the impression that the purpose of this study was to evaluate the Parsons report findings and assess the appropriate aquatic life use designations for these waterbodies; whether they be a full Gulf Coast ecoregion (GCER) aquatic life use or a subcategory of aquatic life use?

**1.1 Paragraph 3, last sentence.** There is discussion of “true reference locations.” By true, is this meaning least impacted reference locations?

**1.2** The following sentence is similar to the statement of purpose in section 1.1:

“This study is to determine if the current designated use and use variation for Coffee Creek and Mossy Lake are appropriate and if any revisions to the designated use for these water bodies should be made.”

See comments in 1.1.

**1.3.** Will there be any concurrent sampling of outfall 001 for comparison to the other sampled sites?

**1.3.1.** Beyond the stormwater discharges, are there any other impacts that could affect Coffee Creek Site 1 due to its close proximity to the city?

**1.3.2.** The Parsons study found that this location was occasionally inundated by the Ouachita and likely allowed GP discharge to impact the location. It is valuable to note the impacts of these occurrences on the current state of Coffee Creek, but this location would not be preferential for use as a reference location or developing a clear picture of Coffee Creek in its natural state. Additionally, it was noted in the previous study that there were likely non point sources (trash dumping, etc) that impacted the location.

**1.4.** The second paragraph discusses that Coffee Creek below Mossy Lake is not to be sampled due to the influence of the GP discharge on these segment as well as the influence of the Ouachita River. Due to flooding, it is likely that a number of other sites on Coffee Creek proposed for this study are likely impacted from the GP discharge from time to time. As noted in the work plan, the Parsons study conducted biological sampling in this location. Continued biological sampling in this location could serve as a beneficial comparison to the Mossy Lake reference site, since it was noted in this work plan that the reference locations were more heavily influenced by the Ouachita than Mossy Lake.

**2.1.3.** Dissolved oxygen (DO) has been a major issue for these waterbodies in relationship to the maintenance of aquatic life. Will there be any diurnal evaluations of in-stream DO data collected? Such data will be beneficial to the development of an appropriate aquatic life use designation.

Additionally, EPA’s study evaluated chemistry in sediment as well as toxicity. If this study is geared to be a comparative study to the Parsons report, will these parameters be tested for as well?

## **General Comments**

1. A use attainability analysis (UAA) examines the suitability of a water body for attaining a given use. For this study, the particular use being examined is the aquatic life use (i.e., a Gulf Coastal Ecoregion (GCER) fishery). EPA’s *Technical Support Manual: Waterbody Survey and Assessments for Conducting Use Attainability Analyses* (1983) describes three central questions to be examined when conducting a UAA, including:

1. What are the aquatic protection uses currently being achieved in the water body?
2. What are the potential uses that can be attained based on the physical, chemical and biological characteristics of the water body; and,
3. What are the causes of any impairment of the uses?

This work plan focuses primarily on answering item 1. Using data from the Parsons report and other sources can assist in question 3, but this plan does not provide much detail into how number 2 will be answered. The submitted work plan and QAPP indicate that this study will be used solely as a comparison to evaluate the findings of EPA's 2007 report. EPA finds it troubling that the QAPP contains no data quality objectives (DQOs) geared towards the utilization of gathered data to be used in the development of an appropriate aquatic life beneficial use for Coffee Creek and Mossy Lake.

EPA maintains that the 2007 Parson's study supports the existence of an aquatic life use in Coffee Creek and Mossy Lake. EPA suggests that this study incorporate the necessary mechanisms to develop the appropriate uses for these waterbodies.

2. There is no mention of an assessment of primary contact for the waterbodies in the current work plan. Is this to be addressed? What are the DQOs for determining the appropriate level of contact?